

CLAIMS

1. A transmitting apparatus, comprising:

a plurality of audio channel material
supplying means for supplying a plurality of audio
broadcast materials of audio digital data;

data supplying means for supplying digital
data for an audio information screen corresponding to a
transmitted audio broadcast;

download audio data supplying means for
supplying download audio data compressed in a
predetermined compressing format;

multiplexing means for multiplexing the audio
digital data of the plurality of audio broadcasts, the
digital data for the audio information screen
corresponding to the transmitted audio broadcast, and
the download audio data; and

transmitting means for transmitting the
multiplexed data.

2. A transmitting method, comprising the steps

of: supplying a plurality of audio broadcast
materials of audio digital data, digital data for an
audio information screen corresponding to a transmitted
audio broadcast, and download audio data of audio data
compressed in a predetermined compressing format;

multiplexing the audio digital data of the
plurality of audio broadcasts, the digital data for the
audio information screen corresponding to the

transmitted audio broadcast, and the download audio data of the audio data compressed in the predetermined compressing format; and

transmitting the multiplexed data.

- 5 3. An information editing apparatus, comprising:
 a plurality of audio channel material
supplying means for supplying a plurality of audio
broadcast materials of audio digital data;

 data supplying means for supplying digital
data for an audio information screen corresponding to a
transmitted audio broadcast;

 download audio data supplying means for
supplying download audio data compressed in a
predetermined compressing format; and

 multiplexing means for multiplexing the audio
digital data of the plurality of audio broadcasts, the
digital data for the audio information screen
corresponding to the transmitted audio broadcast, and
the download audio data,

- 20 wherein the same music material is repeatedly
transmitted in each of the plurality of audio
broadcasts, and

 wherein the music materials transmitted in
the plurality of audio broadcasts correspond to the
25 download audio data.

4. An information editing method, comprising the
steps of:

supplying a plurality of audio broadcast materials of audio digital data, digital data for an audio information screen corresponding to a transmitted audio broadcast, and download audio data of audio data compressed in a predetermined compressing format; and

multiplexing the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data of the audio data compressed in the predetermined compressing format,

wherein the same music material is repeatedly transmitted in each of the plurality of audio broadcasts, and

wherein the music materials transmitted in the plurality of audio broadcasts correspond to the download audio data.

5. A receiving apparatus, comprising:

receiving means for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an audio information screen corresponding to a transmitted audio broadcast, and download audio data of audio data compressed in a predetermined compressing format have been multiplexed;

data demultiplexing means for demultiplexing the multiplexed signal into the audio digital data of the plurality of audio broadcasts, the digital data for

the audio information screen corresponding to the transmitted audio broadcast, and the download audio data compressed in the predetermined compressing format;

5 audio reproducing means for reproducing sound from the audio digital data;

 download data decoding means for decoding the download audio data;

10 displaying means for displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast;

15 input means for inputting data on the display screen; and

20 controlling means for selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen through said input means and for outputting download audio data of music information corresponding to an audio information download command that is input on the display screen through said input means.

25 6. A receiving method, comprising the steps of:
 receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an audio information screen corresponding to a

transmitted audio broadcast, and download audio data of audio data compressed in a predetermined compressing format have been multiplexed;

5 demultiplexing the multiplexed signal into the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data compressed in the predetermined compressing format;

10 reproducing sound from the audio digital data;

15 displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast;

20 selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen; and

outputting download audio data of music information corresponding to an audio information download command that is input on the display screen.

7. An information storing apparatus, comprising:

25 receiving means for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an audio information screen corresponding to a transmitted audio broadcast, and download audio data of audio data compressed in a

predetermined compressing format have been multiplexed;

data demultiplexing means for demultiplexing the multiplexed signal into the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data compressed in the predetermined compressing format;

audio reproducing means for reproducing sound from the audio digital data;

displaying means for displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast;

input means for inputting data on the display screen; controlling means for selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen through said input means and for outputting download audio data of music information corresponding to an audio information download command that is input on the display screen through said input means; and

storing means for storing the output download audio data,

wherein when music information selection

command is input on the display screen through said
input means, an audio broadcast of a music program
corresponding to the music information selection
command is selected so as to allow the listener to
listen to a demo of the music material, and

wherein when the music information download
command is input, audio data corresponding to the music
information is stored to said storing means.

8. An information storing method, comprising the
steps of:

receiving a signal of which audio digital
data of a plurality of audio broadcasts, digital data
for an audio information screen corresponding to a
transmitted audio broadcast, and download audio data of
audio data compressed in a predetermined compressing
format have been multiplexed;

demultiplexing the multiplexed signal into
the audio digital data of the plurality of audio
broadcasts, the digital data for the audio information
screen corresponding to the transmitted audio
broadcast, and the download audio data compressed in
the predetermined compressing format;

reproducing sound from the audio digital
data;

displaying audio information of the
transmitted audio broadcast corresponding to the
digital data for the audio information screen

corresponding to the transmitted audio broadcast;

when music information selection command is
input on the display screen, selecting an audio
broadcast of a music program corresponding to the music
information selection command so as to allow the
listener to listen to a demo of the music material, and

when the music information download command
is input, storing audio data corresponding to the music
information.

9. A broadcasting system having a transmitting
station for broadcasting a TV signal and an audio
signal and a receiving station for receiving signals
from the transmitting station,

wherein the transmitting station has a
transmitting apparatus comprising:

a plurality of audio channel material
supplying means for supplying a plurality of audio
broadcast materials of audio digital data;

data supplying means for supplying digital
data for an audio information screen corresponding to a
transmitted audio broadcast;

download audio data supplying means for
supplying download audio data compressed in a
predetermined compressing format;

multiplexing means for multiplexing the audio
digital data of the plurality of audio broadcasts, the
digital data for the audio information screen

corresponding to the transmitted audio broadcast, and
the download audio data; and

transmitting means for transmitting the
multiplexed data,

5

and

wherein the receiving station has a receiving
apparatus comprising:

receiving means for receiving a signal of
which audio digital data of a plurality of audio
broadcasts, digital data for an audio information
screen corresponding to a transmitted audio broadcast,
and download audio data of audio data compressed in a
predetermined compressing format have been multiplexed;

data demultiplexing means for demultiplexing
the multiplexed signal into the audio digital data of
the plurality of audio broadcasts, the digital data for
the audio information screen corresponding to the
transmitted audio broadcast, and the download audio
data compressed in the predetermined compressing
format;

20

audio reproducing means for reproducing sound
from the audio digital data;

download data decoding means for decoding the
download audio data;

25

displaying means for displaying audio
information of the transmitted audio broadcast
corresponding to the digital data for the audio

information screen corresponding to the transmitted audio broadcast;

input means for inputting data on the display screen; and

5 controlling means for selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen through said input means and for outputting download audio data of music information corresponding to an audio information download command that is input on the display screen through said input means, and

10 an information storing apparatus for storing the download audio data that is output from the receiving apparatus.

15 10. A transmitting apparatus, comprising:

20 program broadcast material supplying means for supplying a video broadcast material composed of moving picture digital data and audio digital data corresponding thereto;

 a plurality of audio channel material supplying means for supplying a plurality of audio broadcast materials of audio digital data;

25 data supplying means for supplying digital data for an audio information screen corresponding to a transmitted audio broadcast;

 multiplexing means for multiplexing the

moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, and the digital data for the audio information screen corresponding to the transmitted audio broadcast; and

transmitting means for transmitting the multiplexed data.

11. A transmitting method, comprising the steps of:

supplying a video broadcast material composed of moving picture digital data and audio digital data corresponding thereto, a plurality of audio broadcast materials of audio digital data, and digital data for an audio information screen corresponding to a transmitted audio broadcast;

multiplexing the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, and the digital data for the audio information screen corresponding to the transmitted audio broadcast; and

transmitting the multiplexed data.

12. An information editing apparatus, comprising:

program broadcast material supplying means for supplying a video broadcast material composed of moving picture digital data and audio digital data corresponding thereto;

a plurality of audio channel material
supplying means for supplying a plurality of audio
broadcast materials of audio digital data;

5 data supplying means for supplying digital
data for an audio information screen corresponding to a
transmitted audio broadcast; and

10 multiplexing means for multiplexing the
moving picture digital data of the video broadcast, the
audio digital data corresponding thereto, the audio
digital data of the plurality of audio broadcasts, and
the digital data for the audio information screen
corresponding to the transmitted audio broadcast,

15 wherein the same music material is repeatedly
transmitted in each of the plurality of audio
broadcasts.

13. An information editing method, comprising the
steps of:

20 supplying a video broadcast material composed
of moving picture digital data and audio digital data
corresponding thereto, a plurality of audio broadcast
materials of audio digital data, and digital data for
an audio information screen corresponding to a
transmitted audio broadcast; and

25 multiplexing the moving picture digital data
of the video broadcast, the audio digital data
corresponding thereto, the audio digital data of the
plurality of audio broadcasts, and the digital data for

the audio information screen corresponding to the transmitted audio broadcast,

wherein the same music material is repeatedly transmitted in each of the plurality of audio broadcasts.

14. A receiving apparatus, comprising:

receiving means for receiving a signal of which moving picture digital data of a video broadcast, audio digital data corresponding thereto, audio digital data of a plurality of audio broadcasts, and digital data for an audio information screen corresponding to a transmitted audio broadcast have been multiplexed;

data demultiplexing means for demultiplexing the multiplexed signal into the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, and the digital data for the audio information screen corresponding to the transmitted audio broadcast;

moving picture reproducing means for reproducing a moving picture from the moving picture digital data;

audio reproducing means for reproducing sound from the audio digital data;

displaying means for displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio

information screen corresponding to the transmitted audio broadcast on a screen;

input means for inputting data on the display screen; and

5 controlling means for selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen through said input means.

15. A receiving method, comprising the steps of:

receiving a signal of which moving picture digital data of a video broadcast, audio digital data corresponding thereto, audio digital data of a plurality of audio broadcasts, and digital data for an audio information screen corresponding to a transmitted audio broadcast have been multiplexed;

demultiplexing the multiplexed signal into the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, and the digital data for the audio information screen corresponding to the transmitted audio broadcast;

reproducing a moving picture from the moving picture digital data;

reproducing sound from the audio digital data;

displaying audio information of the transmitted audio broadcast corresponding to the

digital data for the audio information screen
corresponding to the transmitted audio broadcast on a
screen; and

selecting an audio broadcast of a music
5 program corresponding to a music information selection
command that is input on the display screen.

16. An information storing apparatus, comprising:
receiving means for receiving a signal of
which moving picture digital data of a video broadcast,
audio digital data corresponding thereto, audio digital
data of a plurality of audio broadcasts, and digital
data for an audio information screen corresponding to a
transmitted audio broadcast have been multiplexed;

data demultiplexing means for demultiplexing
the multiplexed signal into the moving picture digital
data of the video broadcast, the audio digital data
corresponding thereto, the audio digital data of the
plurality of audio broadcasts, and the digital data for
the audio information screen corresponding to the
20 transmitted audio broadcast;

moving picture reproducing means for
reproducing a moving picture from the moving picture
digital data;

audio reproducing means for reproducing sound
25 from the audio digital data;

displaying means for displaying audio
information of the transmitted audio broadcast

corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast on a screen;

5 input means for inputting data on the display screen;

 controlling means for selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen through said input means; and

 storing means for storing the reproduced audio signal,

 wherein when music information selection command is input on the display screen through said input means, an audio broadcast of a music program corresponding to the music information selection command is selected and the audio signal of the audio broadcast is stored to said storing means.

17. An information storing method, comprising the steps of:

20 receiving a signal of which moving picture digital data of a video broadcast, audio digital data corresponding thereto, audio digital data of a plurality of audio broadcasts, and digital data for an audio information screen corresponding to a transmitted
25 audio broadcast have been multiplexed;

 demultiplexing the multiplexed signal into the moving picture digital data of the video broadcast,

the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, and the digital data for the audio information screen corresponding to the transmitted audio broadcast;

5 reproducing a moving picture from the moving picture digital data;

 reproducing sound from the audio digital data;

 displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast on a screen; and

 when music information selection command is input on the display screen, selecting an audio broadcast of a music program corresponding to the music information selection command and storing the audio signal of the audio broadcast.

18. A broadcasting system having a transmitting station for broadcasting a TV signal and an audio signal and a receiving station for receiving signals from the transmitting station,

 wherein the transmitting station has a transmitting apparatus comprising:

25 program broadcast material supplying means for supplying a video broadcast material composed of moving picture digital data and audio digital data

corresponding thereto;

a plurality of audio channel material
supplying means for supplying a plurality of audio
broadcast materials of audio digital data;

5 data supplying means for supplying digital
data for an audio information screen corresponding to a
transmitted audio broadcast;

multiplexing means for multiplexing the
moving picture digital data of the video broadcast, the
audio digital data corresponding thereto, the audio
digital data of the plurality of audio broadcasts, and
the digital data for the audio information screen
corresponding to the transmitted audio broadcast; and

transmitting means for transmitting the
multiplexed data, and

wherein the receiving station has a receiving
apparatus comprising:

receiving means for receiving a signal of
which moving picture digital data of a video broadcast,
audio digital data corresponding thereto, audio digital
data of a plurality of audio broadcasts, and digital
data for an audio information screen corresponding to a
transmitted audio broadcast have been multiplexed;

data demultiplexing means for demultiplexing
the multiplexed signal into the moving picture digital
data of the video broadcast, the audio digital data
corresponding thereto, the audio digital data of the

plurality of audio broadcasts, and the digital data for the audio information screen corresponding to the transmitted audio broadcast;

moving picture reproducing means for
5 reproducing a moving picture from the moving picture digital data;

audio reproducing means for reproducing sound from the audio digital data;

10 displaying means for displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast on a screen;

15 input means for inputting data on the display screen; and

controlling means for selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen through said input means, and

20 an information storing apparatus for storing sound reproduced from the receiving apparatus.

19. A transmitting apparatus, comprising:

program broadcast material supplying means for supplying a video broadcast material composed of
25 moving picture digital data and audio digital data corresponding thereto;

a plurality of audio channel material

supplying means for supplying a plurality of audio
broadcast materials of audio digital data;

data supplying means for supplying digital
data for an audio information screen corresponding to a
transmitted audio broadcast;

download data supplying means for supplying
download audio data compressed corresponding to a
predetermined compressing format;

multiplexing means for multiplexing the
moving picture digital data of the video broadcast, the
audio digital data corresponding thereto, the audio
digital data of the plurality of audio broadcasts, the
digital data for the audio information screen
corresponding to the transmitted audio broadcast, and
the download audio data; and

transmitting means for transmitting the
multiplexed data.

20. A transmitting method, comprising the steps
of:

supplying a video broadcast material composed
of moving picture digital data and audio digital data
corresponding thereto, a plurality of audio broadcast
materials of audio digital data, and digital data for
an audio information screen corresponding to a
transmitted audio broadcast;

supplying download audio data compressed
corresponding to a predetermined compressing format;

multiplexing the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data compressed in the predetermined compressing format; and

transmitting means for transmitting the multiplexed data.

21. An information editing apparatus, comprising:
program broadcast material supplying means for supplying a video broadcast material composed of moving picture digital data and audio digital data corresponding thereto;

a plurality of audio channel material supplying means for supplying a plurality of audio broadcast materials of audio digital data;

data supplying means for supplying digital data for an audio information screen corresponding to a transmitted audio broadcast;

download data supplying means for supplying download audio data compressed corresponding to a predetermined compressing format;

multiplexing means for multiplexing the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio

digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data; and

5 transmitting means for transmitting the multiplexed data.

 wherein the same music material is repeatedly transmitted in each of the plurality of audio broadcasts, and

10 wherein the music materials transmitted in the plurality of audio broadcasts correspond to the download audio data.

22. An information editing method, comprising the steps of:

15 supplying a video broadcast material composed of moving picture digital data and audio digital data corresponding thereto, a plurality of audio broadcast materials of audio digital data, digital data for an audio information screen corresponding to a transmitted audio broadcast, and download audio data compressed corresponding to a predetermined compressing format; and

20 multiplexing the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the

transmitted audio broadcast, and the download audio data,

wherein the same music material is repeatedly transmitted in each of the plurality of audio broadcasts, and

wherein the music materials transmitted in the plurality of audio broadcasts correspond to the download audio data.

23. A receiving apparatus, comprising:

receiving means for receiving a signal of which moving picture digital data of a video broadcast, audio digital data corresponding thereto, audio digital data of a plurality of audio broadcasts, digital data for an audio information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed;

data demultiplexing means for demultiplexing the multiplexed signal into the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data compressed in the predetermined compressing format;

moving picture reproducing means for

reproducing a moving picture from the moving picture digital data;

audio reproducing means for reproducing sound from the audio digital data;

5 download data decoding means for decoding the download audio data;

displaying means for displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast on a screen;

input means for inputting data on the display screen; and

controlling means for selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen through said input means and for outputting download audio data of music information corresponding to an audio information download command that is input on the display screen through said input means.

24. A receiving method, comprising the steps of:
receiving a signal of which moving picture digital data of a video broadcast, audio digital data corresponding thereto, audio digital data of a plurality of audio broadcasts, digital data for an audio information screen corresponding to a transmitted

audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed;

5 demultiplexing the multiplexed signal into the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data compressed in the predetermined compressing format;

reproducing a moving picture from the moving picture digital data;

reproducing sound from the audio digital data;

decoding the download audio data;

displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast on a screen; and

20 selecting an audio broadcast of a music program corresponding to a music information selection command that is input on the display screen and for outputting download audio data of music information corresponding to an audio information download command that is input on the display screen.

25. An information storing apparatus, comprising:
receiving means for receiving a signal of
which moving picture digital data of a video broadcast,
audio digital data corresponding thereto, audio digital
5 data of a plurality of audio broadcasts, digital data
for an audio information screen corresponding to a
transmitted audio broadcast, and download audio data
compressed in a predetermined compressing format have
been multiplexed;

10 data demultiplexing means for demultiplexing
the multiplexed signal into the moving picture digital
data of the video broadcast, the audio digital data
corresponding thereto, the audio digital data of the
plurality of audio broadcasts, the digital data for the
15 audio information screen corresponding to the
transmitted audio broadcast, and the download audio
data compressed in the predetermined compressing
format;

20 moving picture reproducing means for
reproducing a moving picture from the moving picture
digital data;

audio reproducing means for reproducing sound
from the audio digital data;

25 displaying means for displaying audio
information of the transmitted audio broadcast
corresponding to the digital data for the audio
information screen corresponding to the transmitted

audio broadcast on a screen;

input means for inputting data on the display screen;

controlling means for selecting an audio
5 broadcast of a music program corresponding to a music
information selection command that is input on the
display screen through said input means and for
outputting download audio data of music information
corresponding to an audio information download command
that is input on the display screen through said input
means; and

storing means for storing the output download
audio data,

wherein when music information selection
15 command is input on the display screen through said
input means, an audio broadcast of a music program
corresponding to the music information selection
command is selected so as to allow the listener to
listen to a demo of the music material, and

20 wherein when the music information download
command is input, audio data corresponding to the music
information is stored to said storing means.

26. An information storing method, comprising the
steps of:

25 receiving a signal of which moving picture
digital data of a video broadcast, audio digital data
corresponding thereto, audio digital data of a

plurality of audio broadcasts, digital data for an audio information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed;

demultiplexing the multiplexed signal into the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen corresponding to the transmitted audio broadcast, and the download audio data compressed in the predetermined compressing format;

reproducing a moving picture from the moving picture digital data;

reproducing sound from the audio digital data;

displaying audio information of the transmitted audio broadcast corresponding to the digital data for the audio information screen corresponding to the transmitted audio broadcast on a screen;

when music information selection command is input on the display screen, selecting an audio broadcast of a music program corresponding to the music information selection command so as to allow the listener to listen to a demo of the music material, and

when the music information download command is input, storing audio data corresponding to the music information.

27. A broadcasting system having a transmitting station for broadcasting a TV signal and an audio signal and a receiving station for receiving signals from the transmitting station,

wherein the transmitting station has a transmitting apparatus comprising:

program broadcast material supplying means for supplying a video broadcast material composed of moving picture digital data and audio digital data corresponding thereto;

a plurality of audio channel material supplying means for supplying a plurality of audio broadcast materials of audio digital data;

data supplying means for supplying digital data for an audio information screen corresponding to a transmitted audio broadcast;

download audio data supplying means for supplying download audio data compressed in a predetermined compressing format;

multiplexing means for multiplexing the moving picture digital data of the video broadcast, the audio digital data corresponding thereto, the audio digital data of the plurality of audio broadcasts, the digital data for the audio information screen

corresponding to the transmitted audio broadcast, and
the download audio data; and

transmitting means for transmitting the
multiplexed data, and

5 wherein the receiving station has a receiving
apparatus comprising:

receiving means for receiving a signal of
which moving picture digital data of a video broadcast,
audio digital data corresponding thereto, audio digital
data of a plurality of audio broadcasts, digital data
for an audio information screen corresponding to a
transmitted audio broadcast, and the download audio
data compressed in the predetermined compressing format
have been multiplexed;

10
15 data demultiplexing means for demultiplexing
the multiplexed signal into the moving picture digital
data of the video broadcast, the audio digital data
corresponding thereto, the audio digital data of the
plurality of audio broadcasts, the digital data for the
20 audio information screen corresponding to the
transmitted audio broadcast, and the download audio
data compressed in the predetermined compressing
format;

25 moving picture reproducing means for
reproducing a moving picture from the moving picture
digital data;

audio reproducing means for reproducing sound

from the audio digital data;

download data decoding means for decoding the
download audio data;

displaying means for displaying audio
5 information of the transmitted audio broadcast
corresponding to the digital data for the audio
information screen corresponding to the transmitted
audio broadcast on a screen;

input means for inputting data on the display
10 screen; and

controlling means for selecting an audio
broadcast of a music program corresponding to a music
information selection command that is input on the
display screen through said input means and for
15 outputting download audio data of music information
corresponding to an audio information download command
that is input on the display screen through said input
means, and

an information storing apparatus for storing
20 sound reproduced from the receiving apparatus.

28. A receiving apparatus for receiving a signal
of which audio digital data of a plurality of audio
broadcasts, digital data for an information screen
corresponding to a transmitted audio broadcast, and
25 download audio data compressed in a predetermined
compressing format have been multiplexed, the receiving
apparatus comprising:

decoding means for decoding PCM audio data from the download audio data compressed in the predetermined compressing format;

5 selecting means for selectively outputting the audio data compressed in the predetermined compressing format and the PCM audio data;

a data output terminal for outputting audio data received from said selecting means; and

10 a control signal input/output terminal for inputting and outputting a control signal,

wherein the receiving apparatus determines whether or not a device connected thereto is capable of inputting the audio data compressed in the predetermined compressing format corresponding to the control signal that is input and output through said control signal input/output terminal.

25 29. The receiving apparatus as set forth in claim 28,

20 wherein said selecting means selects the audio data compressed in the predetermined compressing format when the connected device is capable of inputting the audio data compressed in the predetermined compressing format.

30. A receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an information screen corresponding to a transmitted audio broadcast, and

download audio data compressed in a predetermined compressing format have been multiplexed, the receiving apparatus comprising:

5 decoding means for decoding PCM audio data from the download audio data compressed in the predetermined compressing format;

 selecting means for selectively outputting the audio data compressed in the predetermined compressing format and the PCM audio data; and

10 interface means for exchanging digital audio data received from said selecting means and a control signal,

 wherein the receiving apparatus determines whether or not a device connected thereto is capable of inputting the audio data compressed in the predetermined compressing format corresponding to the control signal that is exchanged through said interface means, and

20 wherein said selecting means selects the audio data compressed in the predetermined compressing format or the PCM audio data corresponding to the determined result.

31. The receiving apparatus as set forth in claim 30,

25 wherein said selecting means selects the audio data compressed in the predetermined compressing format when the connected device is capable of

inputting the audio data compressed in the
predetermined compressing format.

32. An information storing system, comprising:

5 a receiving apparatus for receiving a signal
of which audio digital data of a plurality of audio
broadcasts, digital data for an information screen
corresponding to a transmitted audio broadcast, and
download audio data compressed in a predetermined
compressing format have been multiplexed; and

10 a storing apparatus for storing the download
audio data received by said receiving apparatus,

wherein the receiving apparatus comprises:

15 decoding means for decoding PCM audio data
from the download audio data compressed in the
predetermined compressing format;

20 selecting means for selectively outputting
the audio data compressed in the predetermined
compressing format and the PCM audio data;

a data output terminal for outputting audio
data received from said selecting means; and

a control signal input/output terminal for
inputting and outputting a control signal,

wherein the storing apparatus comprises:

25 a control signal input/output terminal for
inputting and outputting the control signal, and

wherein the receiving apparatus exchanges the
control signal with said storing apparatus, determines

whether or not said storing apparatus is capable of inputting the audio data compressed in the predetermined compressing format, and causes said selecting means to select the audio data compressed in the predetermined compressing format or the PCM audio data corresponding to the determined result.

33. The information storing system as set forth in claim 32,

wherein when said storing apparatus is capable of inputting the audio data compressed in the predetermined compressing format, said selecting means selects the audio data compressed in the predetermined compressing format.

34. An information storing system, comprising:
a receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed; and

a storing apparatus for storing the download audio data received by said receiving apparatus,

wherein the receiving apparatus comprises:
decoding means for decoding PCM audio data from the download audio data compressed in the predetermined compressing format;

selecting means for selectively outputting

the audio data compressed in the predetermined
compressing format and the PCM audio data; and

interface means for exchanging digital audio
data received from said selecting means and a control
5 signal,

wherein the storing apparatus comprises:

interface means for exchanging audio signal
and a control signal, and

wherein the receiving apparatus exchanges the
control signal with said storing apparatus, determines
whether or not said storing apparatus is capable of
inputting the audio data compressed in the
predetermined compressing format, and causes said
selecting means to select the audio data compressed in
the predetermined compressing format or the PCM audio
data corresponding to the determined result.

35. The information storing system as set forth
in claim 32,

wherein when said storing apparatus is
20 capable of inputting the audio data compressed in the
predetermined compressing format, said selecting means
selects the audio data compressed in the predetermined
compressing format.

36. A transmitting apparatus for multiplexing
25 audio digital data of a plurality of audio broadcasts
and digital data for an information screen
corresponding to a transmitted audio broadcast and

transmitting the multiplexed signal, comprising:

means for inserting an identification signal that represents a start position and an end position of a music title in audio digital data of an audio broadcast.

37. A receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts and digital data for an information screen corresponding to a transmitted audio broadcast have been multiplexed, an identification signal that represents a start position and an end position of a music title being inserted in audio digital data of an audio broadcast, the receiving apparatus comprising:

means for decoding data of the information screen and displaying the information screen;

input means for inputting a desired music title to be stored on the information screen displayed;

identification signal detecting means for detecting the identification signal from the received audio broadcast; and

controlling means for generating a record start command corresponding to the identification signal that represents the start position of a music program and generating a record end command corresponding to the identification signal that represents the end position of the music program.

38. An information storing system having a

receiving apparatus for receiving a signal of which
audio digital data of a plurality of audio broadcasts
and digital data for an information screen
corresponding to a transmitted audio broadcast have
5 been multiplexed and a storing apparatus for storing an
output signal of the receiving apparatus,

wherein the information storing system allows
the listener to select a desired one from the plurality
of audio broadcasts on the audio information screen and
records a music title of the selected audio broadcast
to the storing apparatus,

wherein an identification signal that
represents a start position and an end position of a
music title is inserted in the audio digital data of
the audio broadcast,

wherein when an information storage command
has been input to the receiving apparatus, it
determines whether or not the identification signal
that represents the start position of the music title
20 has been detected, when the identification signal that
represents the start position of the music title has
been detected, the receiving apparatus sends a record
start command to the storing apparatus, and when the
identification signal that represents the end position
25 of the music title has been detected, the recording
apparatus sends a record end command to the storing
apparatus, and

wherein when the storing apparatus has received the record start command from the receiving apparatus, the storing apparatus starts recording a signal received from the receiving apparatus and when the storing apparatus has received the record end command from the receiving apparatus, the storing apparatus stops recording the signal received from the recording apparatus.

39. A transmitting apparatus for multiplexing audio digital data of a plurality of audio broadcasts, digital data for an information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format, the transmitting apparatus comprising:

means for inserting identification data that represents a start position and an end position in the download audio data.

40. A receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed, identification data that represents a start position and an end position of a music title being inserted in the download music data, the receiving apparatus comprising:

means for decoding data of the information screen and displaying the information screen;

input means for inputting a desired music title to be stored on the information screen displayed;

5 identification data detecting means for detecting the identification data from the received download audio data; and

controlling means for generating a record start command corresponding to the identification data that represents the start position of a music program and generating a record end command corresponding to the identification data that represents the end position of the music program.

41. An information storing system having a receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed and a storing apparatus for storing an output signal of the receiving apparatus,

20 wherein the information storing system allows the listener to select a desired one from the download audio data on the audio information screen and records the selected download audio data to the storing apparatus,

25 wherein identification data that represents a

start position and an end position of the download audio data is inserted in the download audio data,

wherein when an information storage command has been input to the receiving apparatus, it determines whether or not the identification data that represents the start position of the music title has been detected, when the identification data that represents the start position of the music title has been detected, the receiving apparatus sends a record start command to the storing apparatus, and when the identification data that represents the end position of the music title has been detected, the recording apparatus sends a record end command to the storing apparatus, and

wherein when the storing apparatus has received the record start command from the receiving apparatus, the storing apparatus starts recording a signal received from the receiving apparatus and when the storing apparatus has received the record end command from the receiving apparatus, the storing apparatus stops recording the signal received from the recording apparatus.

42. A receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts and digital data for an information screen corresponding to a transmitted audio broadcast have been multiplexed, an identification signal that

represents a start position and an end position of a music title being inserted in audio digital data of an audio broadcast, the receiving apparatus comprising:

means for decoding data of the information screen and displaying the information screen;

input means for inputting a plurality of music titles to be stored on the information screen displayed;

identification signal detecting means for detecting the identification signal from the received audio broadcast; and

controlling means for repeating a sequence of processes for selecting an audio broadcast corresponding to a first music title to be stored from the plurality of audio broadcasts, for generating a record start command when the identification signal that represents the start position of the music program has been detected, for generating a record end command and selecting an audio broadcast corresponding to a second music title to be stored from the plurality of audio broadcasts when the identification signal that represents the end position of the music title has been detected, and for generating a record end command when the identification signal that represents the end position of the music program has been detected.

43. An information storing system having a receiving apparatus for receiving a signal of which

audio digital data of a plurality of audio broadcasts,
digital data for an information screen corresponding to
a transmitted audio broadcast, and download audio data
compressed in a predetermined compressing format have
5 been multiplexed and a storing apparatus for storing an
output signal of the receiving apparatus,

wherein the information storing system allows
the listener to select a desired one from the plurality
of audio broadcasts on the audio information screen and
records the selected audio data to the storing
apparatus,

wherein an identification signal that
represents a start position and an end position of a
music title is inserted in the audio digital data of
the audio broadcast,

wherein the receiving apparatus repeats a
sequence of processes for selecting an audio broadcast
corresponding to a first music title to be stored from
the plurality of audio broadcasts, for generating a
20 record start command when the identification signal
that represents the start position of the music title
has been detected, for generating a record end command
and selecting a audio broadcast corresponding to a
second music title to be stored from the plurality of
25 audio broadcasts when the identification signal that
represents the end position of the music title has been
detected, and for generating a record end command when

the identification signal that represents the end position of the music title has been detected, and

wherein when the storing apparatus has received the record start command from the receiving apparatus, the storing apparatus starts recording a signal received from the receiving apparatus and when the storing apparatus has received the record end command from the receiving apparatus, the storing apparatus stops recording the signal received from the recording apparatus.

44. A receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed, identification data that represents a start position and an end position of a music title being inserted in download audio data, the receiving apparatus comprising:

means for decoding data of the information screen and displaying the information screen;

input means for inputting a plurality of music titles to be stored on the information screen displayed;

identification data detecting means for detecting the identification data from the received

download audio data; and

controlling means for repeating a sequence of processes for selecting download audio data corresponding to a first music title to be stored from the download audio data, for generating a record start command when the identification data that represents the start position of the music program has been detected, for generating a record end command and selecting download audio data corresponding to a second music title to be stored from the download audio data when the identification data that represents the end position of the music title has been detected, and for generating a record end command when the identification data that represents the end position of the music program has been detected.

45. An information storing system having a receiving apparatus for receiving a signal of which audio digital data of a plurality of audio broadcasts, digital data for an information screen corresponding to a transmitted audio broadcast, and download audio data compressed in a predetermined compressing format have been multiplexed and a storing apparatus for storing an output signal of the receiving apparatus,

wherein the information storing system allows the listener to select download audio data corresponding to a plurality of music titles from the download audio data on the audio information screen and

records the selected download audio data to the storing apparatus,

wherein identification data that represents a start position and an end position of a music title is inserted in the download audio data,

wherein the receiving apparatus repeats a sequence of processes for selecting download audio data corresponding to a first music title to be stored from the download audio data, for generating a record start command when the identification data that represents the start position of the music title has been detected, for generating a record end command and selecting download audio data corresponding to a second music title to be stored from the download audio data when the identification data that represents the end position of the music title has been detected, and for generating a record end command when the identification data that represents the end position of the music title has been detected, and

wherein when the storing apparatus has received the record start command from the receiving apparatus, the storing apparatus starts recording a signal received from the receiving apparatus and when the storing apparatus has received the record end command from the receiving apparatus, the storing apparatus stops recording the signal received from the recording apparatus.